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## ABSTRACT

A study examined the influence of classroom organization, student age, and student ability on 122 students' perceptions of who were the "better readers" in their classrooms. The students were members of one second grade and one fifth grade receiving reading instruction in a whole-class format; a second-third grade combination classroom taught with four ability-based groups; and one second grade and one fifth grade taught in permanent ability-based groups. The students were asked to rank their reading books from easiest to hardest and to decide which of two peers was a better reader. The results showed that particularly high levels of agreement on better readers occurred in the classes with whole-class instructional formats. While the data did not indicate that students' ages had any effect on their perceptions, ability differences suggested that students in ability-based instructional groups were less likely to make accurate judgments about task performance, and that being in a classroom where reading groups operated at the same time may provide low-ability students with useful information for judging other students in the classroom. Overall, the study indicated that teachers can arrange their classrooms to increase or decrease the amount of information students receive that can influence students' views of each other and, presumably, themselves. (RL)

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# Class Size and Instruction Program

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## Classroom Effects on Student Perceptions of Better Readers

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This paper examines the perceptions of elementary school students regarding who are "better readers" in classrooms. Early in their school experience, students form perceptions about themselves and their peers. The very nature of the schooling experience may be responsible for this fact. When students enter school, they enter an environment where they must work together in the same room on the same or similar tasks, where there are general expectations for how quickly they will progress, and where achievement is rewarded.

In this environment, students learn early to rank the relative achievement of their peers (Stipek, 1981). Initially, most students hold quite positive views of their own performance, and they remain hopeful for the future even in the face of apparently negative feedback such as low grades (Entwisle and Hayduk, 1978; Nicholls, 1978). Around second grade, as students assimilate feedback about their own relative position, they begin to rate their own achievement in a manner consistent with ratings by teachers and peers (Stipek, 1981; Nicholls, 1978). This means that some students inevitably come to see themselves as relatively high and others as relatively low achievers.

It is important, therefore, to understand the ways students conceptualize and interpret what goes on in classes. Students' views may vary depending on characteristics of the school setting. The manner in which teachers organize instructional activities may influence the opportunities students have for making comparisons, as well as the amount and types of information available to them. If so, these setting effects would be important because teachers could change or adapt instructional organization and activities to produce more desirable outcomes.

In this paper we will focus on three factors which may influence student perceptions: (1) classroom organization, (2) student age, and (3) student ability.

Activity form and grouping potentially influence the nature and frequency of feedback which is available to students. During a whole-class lesson, both performance and feedback are public. Teachers who use recitation and class task activities provide their students with many opportunities for public performance (Bossert, 1979). Students can compare their own performances with others' on the same task, and disparities among students' achievements are apparent. However, when students are engaged in a seatwork phase of whole class instruction, performance is much less public and teachers have an opportunity to provide individual feedback to students. As classroom activities become more diverse and content is more differentiated (a multitask classroom), students become involved in tasks which are neither public nor comparable. Such an organization would limit the opportunity for performance comparisons.

The degree of public performance in classrooms has been linked to the perceptions students have of themselves and their classmates. Students from classrooms where performance visibility is high are better able to agree among themselves and with their teachers about the reading ability of their classmates (Rosenholtz and Wilson, 1980). Moreover, students perceive more differential teacher treatment in classrooms where teachers publicly announce students' scores and point out good and poor students (Marshall et al., 1980), and students use this public information in making judgments about how smart other students are (Weinstein, 1981).

On the other hand, grouping students for instruction provides them

with different information about the performance levels of their peers (Rosenbaum, 1980). When grouping is used, students are not always able to observe the performance of students in other groups, and, in some cases, may be unaware of ability group assignments (Eder, 1979). However, the way teachers design and implement group activities has been found to influence the visibility of groups (Goldberg et al., 1966) which, in turn, may provide students with information about their own abilities.

The grouping practices which teachers use have been found to influence students' perceptions of their classmates' abilities. In exploring how students decide they are smart, Weinstein (1981) found that they primarily use information about poor performance. But they also consider grouping practices in making their decisions. When probed for more information, students were able to make distinctions between groups. For example, Clements et al. (1980) discovered that students mention the materials and tasks used by groups more often than ability differences when describing the differences between reading groups. What this suggests is that students may learn that harder tasks are associated with certain groups, which may influence their perceptions of which students are smart (Nicholls, 1978).

Besides classroom organization, two other factors also appear to influence student perceptions of better readers. First, the age of students may influence their perceptions. Younger children have had fewer classroom experiences and may be developmentally less mature than older students. These differences may influence what they are able to perceive and express. Some of the most concerted effort in this area has been conducted by Nicholls (1978), who has found that older elementary-

aged students are better able to distinguish between effort and ability, are apt to lower their self-ratings on academic attainment, and attach greater incentive value to more difficult tasks. It also has been discovered that students are able to critically assess their peers' performances earlier than their own (Stipek, 1981). In making these comparisons kindergarten through third-graders have been found to focus on work habits and behavior, rather than on academic performance (Clements et al., 1980; Stipek, 1981).

A second factor that may influence student perceptions is their ability level. Because students from different groups engage in different activities and receive varying feedback from teachers, they may differentially perceive classroom events. The research evidence is conflicting. Some studies find ability differences; for example, in describing differential teacher treatment of students, high achievers have reported that female students receive more supportive help from teachers than males, while low achievers seem to feel that low achievers (regardless of sex) receive more supportive help (Weinstein et al., 1980). However, other research reports no differences in perceptions of students from various achievement or ability levels (Clements et al., 1980).

The research reported here differs from previous work in several ways. Unlike other studies (e.g., Marshall et al., 1980; Stipek, 1981; Rosenholtz & Wilson, 1980; Clements et al., 1980), the focus here is on discovering how students define and identify good reading when asked to compare a number of students in their classroom; the effort has been to collect and analyze detailed information on the criteria students use when describing good reading. In particular, these questions are addressed: Do students use

ability group placement when comparing students? What additional information do students use for judging readers in classes with some form of grouping? What are the salient bases of comparison when reading is taught in a whole class situation? How do students' ages and ability levels affect their perceptions of better readers? What is the relationship between students' understanding of the reading program and their reasons for selecting better readers?

### Methodology

#### Sample

The data reported here are part of a larger study of grouping arrangements conducted in seven classrooms in the greater San Francisco Bay Area. For this report, data from two second grades, a second-third combination, and two fifth grades are used.

These five classes provide clear contrasts in instructional organization. In two of the classes, one second grade and one fifth grade, reading was taught in a whole-class format. In these classes, all students used the same reader and participated in the same lessons. In the fifth grade class, the students covered skill units as a whole-class group. These units included a pretest, worksheets, and a posttest. Regardless of pretest score, all students completed the unit together. In the second grade class, the teacher did divide students into two groups for oral reading, but membership in these groups changed from day to day and was not based on ability.

The second-third grade combination class was taught with four ability-based groups. The Harcourt-Brace reading series was used; the lowest

group read the primer and the highest group read the third grade reader. Each of the four groups included second- and third-graders. A permanent aide worked with the lowest group while the teacher rotated between the remaining three groups. Eventually, this arrangement was discontinued and the teacher included the lowest group in her rotation. At this point, the aide either monitored seatwork activities or occasionally worked with one of the groups outside the classroom.

The remaining second and fifth grade classes had permanent ability-based reading groups. These classes operated on a staggered schedule. This schedule, which is common in California, involves having half the students come early in the morning for reading while the other half stays late for reading. With this arrangement, only half the class is present at one time for reading instruction. In each class there were a total of four ability-based reading groups. The two lower groups met in the morning; the two higher groups met in the afternoon.<sup>2</sup> In the fifth grade class, the lowest group used a fourth grade text published by Scott-Foresman, while the other three groups used consecutive readers from the Ginn 720 or 360 series. In the second grade class, the four groups were at consecutive levels in the Economy Press series. In both classes the teacher met alternately with one group and then the other. In the second grade class, an aide was present in the morning to meet with one group. Otherwise, groups not meeting with the teacher were engaged in seatwork.

For ease in describing the sample, the five classes are identified by grade and organization as follows: second grade whole-class = 2W, fifth grade whole-class = 5W, second-third grade grouped = 2/3G, second

grade staggered-group = 2SG, and fifth grade staggered-grouped = 5SG. The selection of these particular classrooms allows for two general levels of comparison. First, between-grade-level comparisons examine similarities and differences in responses due to children's ages. Second, within-grade-level comparisons investigate similarities and differences attributable to classroom organization.

### Interviews

Interviews were conducted with 122 students, or 83 % of the total number of students in the five classes. Students who did not return permission slips were not interviewed. As part of a larger interview schedule, students were asked two general questions, one dealing with book order and the other with better readers.<sup>3</sup> Interviews were conducted in March and took place outside the classroom with only the interviewer and the interviewee present. Each interview lasted about 25 minutes. Interviewers were known to the students through their role as classroom observers since October. Sessions were tape recorded and transcribed to facilitate analysis.

The first question asked students to arrange their different reading books in order from easiest to hardest. For the grouped classes (2/3G, 2SG, and 5SG), the four reading books being used in the class were presented. For the non-grouped classes (2W and 5W), three books being used at the school were presented: the one used in their classroom, one lower-grade book, and one higher-grade book.

The second question asked students to decide which of two students was a better reader and to explain how they had made their choice. Interviewers asked the specific questions: "Who is a better reader, (X)

or \_\_\_\_ (Y) \_\_\_\_?" and "How come?" If students responded that they were the same, they were forced to make a choice. The two choices were always the same sex and the interviewee's name was never used as a comparison.

Three types of comparisons were asked in all classes: (a) a low versus middle reader, (b) a middle versus high reader, and (c) two middle readers. The four reading groups were labeled "low," "average-low," "average-high," and "high." For the staggered-grouped classes, comparisons were then as follows: (a) low versus average-low (both morning readers), (b) average-high versus high (both afternoon readers), and (c) average-low versus average-high (morning versus afternoon). For the grouped class, the same comparisons were provided except group division was not by morning or afternoon schedule. In the classes with whole-class instruction, students were divided into strata on the fall achievement test. Both test scores and observer judgments were used to select low, middle, and high readers for the comparisons. In addition to these three comparisons, students in the grouped and staggered-grouped classes were given one more comparison. This fourth comparison was between two students in the same reading group as the interviewee.

#### Coding Scheme

A coding scheme was developed for each of the two questions. For the first question on book order, whether a student knew the correct order of the books was coded. Responses indicating that students knew correct order were coded as a "1" and those that did not were coded as a "0." The entire set of books had to be placed correctly for a "1" to be coded.

The second question on selection of better readers was coded for whom students selected, their degree of certainty, and their reasons. For degree of certainty, a distinction was made between whether a student immediately made a choice between the two readers or whether s/he expressed reluctance and was forced to choose. Students' explanations for their choices provided a detailed and complex description of their thought processes and the factors they considered. Based on a preliminary analysis, a category system for reasons was devised. This category system was hierarchical and included areas (and subareas) as follows: assignment (level/book, group, staggered schedule), behavior (behavior, effort, help), evaluation (grades), task performance (correctness, quantity, speed, form, understanding), other, and don't know. While the first three reasons students gave for why a student was a better reader were coded, only the first responses are included in this analysis. This strategy allows for equal weighting of responses from different children and does not favor highly verbal children.

Inter-rater reliabilities were calculated for the coding for each question. These were calculated by having two people code 16% of the interviews. These reliabilities are as follows: 98% for book order, 98% for agreement on who was the better reader, 87% for general reason for better reader, and 85% for subarea reason for better reader.

## Results

The section begins with a discussion of agreement among students in their identification of the better reader. To explore possible sources of differences in level of agreement about better readers, information is presented about the students' knowledge of correct book order and about the reasons they use to explain their choices.

### Agreement on Better-Reader Choice

The first analysis considers the issue of whom students selected as the better reader. For each comparison, one choice could be identified a priori as correct. This identification is based on group membership in the grouped and staggered-grouped classes, and on test strata for the whole-class classes. If there were no agreement, then half the students would choose one person in each comparison and half the students would choose the other person. In each class, students are accurate in their selections 75% of the time or more. This serves to validate the a priori selection, since it is the same as the majority position in each case. In effect, this demonstrates that there is a generally recognized continuum of reading skills known to students, observers, testers, and teachers.

Given this general agreement, there are two ways to talk about the selection variable. We can say that a student was accurate or inaccurate in his choice. We also can say that he agreed or disagreed with the majority position. While both statements are true, we prefer the term "agreement" because it emphasizes the classroom reality for the child-- that students agree in their assessment of reading skill.

Although agreement is generally high, there are important differences in the degree of agreement. Table 1 reports the percentage agreement for each class and for ability groups within each class. Within each class, students are divided into four ability groups. In G and SG classes, these groups correspond to instructional groups. In W classes, these represent test-score strata.

The most striking feature of the data in Table 1 is the uniformly high level of agreement in classes 2W and 5W, where reading was taught by whole-class instruction. About 90% of the students in these two classes agree on who is a better reader. There is less agreement in the classes with reading groups. Also, there is an ability-group trend in the classes with reading groups. In staggered-grouped classes, agreement is lowest among low-ability students, especially in the second grade. This ability trend is reversed, however, in the grouped class (2/3G) where the greatest agreement (100%) is among low-ability students and the least agreement (67%) is among high-ability students. These results naturally evoke the question of why students in classes with reading groups show less agreement. The remainder of the paper explores this question, beginning first with a comment about Table 1.

Table 1 presents data averaged over the three different comparisons that were asked--low vs. middle, middle vs. high, and middle vs. middle. There are no differences in agreement among the different comparisons, except for a slight decrease in agreement in class 2/3G for the middle-high comparison. Typically, students in whole-class and grouped classroom organizations agree just as often when comparing a low with middle student as when comparing a middle with high student or two middle students.

These results are important because they are somewhat unexpected. Under whole-class instruction, one might predict that it would be difficult to distinguish two middle readers, who should be similar in performance. Students did express reluctance to make this choice (27% forced choice responses compared to 3% on other comparisons). However, agreement is still high.

Possible comparison differences also could have arisen in the staggered-grouped classes due to the staggered schedule. Recall that with the staggered schedule, lower groups meet in the morning while higher groups meet in the afternoon. Here middle-middle might have been expected to be the most clear cut comparison because it involves a contrast between morning and afternoon readers. For either of the other two comparisons, half the students are required to compare students with whom they have no contact at all during reading periods. But these differences do not arise. Moreover, students in these classes are just as accurate when comparing students in their own session (morning or afternoon) as when comparing students in the other session. There is no apparent problem due to lack of information because of the staggered schedule. This suggests that the staggered schedule has minimal effect on the results. Instead, the presence of reading groups seems to be the important factor.

#### Knowledge of Book Order

One possible reason for lower agreement in the classes with reading groups is that students do not know the order of the groups. Information about the students' knowledge of the relative status of groups was obtained by asking the students to look at the books used in the classroom and put them in order according to difficulty. The percentage of students who could

do this correctly is reported in Table 2.

As mentioned earlier, the nature of the question about book order was different depending on classroom organization. Whole-class students were asked to order three books. One of these was the text used in the class; the other two were a higher and a lower book in the same reading series. Table 2 indicates that whole-class students, who have less direct familiarity with the books, are less able to order the books accurately. Nevertheless, these classes provide an interesting contrast to those with reading groups, especially in the comparison across grade levels.

Two striking features of the book order data in Table 2 are related to ability-levels. First, higher-ability students perform better than lower-ability students. This clearly appears since the two higher groups do better than the two lower groups. This trend holds for all the classes except 2/3G, where low-ability students do better; however, this parallels the earlier finding for this class that low-ability students have higher agreement on better readers. Apparently, low-ability students in this classroom are more aware of the order of the reading groups and who are the better readers than other low-ability students from other classrooms, while high-ability students are less aware of these issues.

Second, low-ability fifth-graders tend to perform quite poorly when identifying book order. Students in classes 2SG, 2W, and 2/3G are generally better than their older counterparts at identifying book order, especially at the low-ability levels. So, lack of knowledge of group order, as reflected in knowledge of book order, does not seem to explain completely the data on choice agreement reported earlier, especially the lower agreement for second-graders, although knowledge of group order is

likely to have some effect on agreement. A more complete picture can be obtained by considering the reasons students gave for their choices.

#### Reasons for Better-Reader Choices

After making a choice of who was a better reader, students were asked to explain how they had made each selection. These responses were then coded by general area and subarea of reason. Table 3 reports the general area of the first reason given.

Information is reported separately by class and also by the nature of the comparison. Entries represent the percentage of first responses in each class that fell in each general reason category. Students in classes with whole-class reading rely on task performance to make their choices. Students in the staggered-grouped classes most frequently cite assignment to groups or sessions as the reason for their choice. Moreover, students in staggered-grouped classes also shift to a focus on task performance when asked to compare students in the same group as themselves, that is, when group membership no longer distinguished choices. Interestingly enough, students in the grouped class, but not the staggered-grouped classes, rely more heavily on task performance, rather than group assignment, when explaining differences in readers in all four of the comparisons.

Although assignment to groups is the most frequent reason given by students in staggered-grouped classes, still only about half the students cite this reason. This suggests that group membership is an important factor considered by students, but certainly not the only factor. Students in class 2/3G bear this out since they rely on task performance more than group assignment.

Further analyses were conducted to determine whether use of assignment as a reason differs by ability level. The lowest-ability students in class 2SG appear to be outliers in use (or lack of use) of assignment as a reason. They use this reason only 7% of the time compared to 58% for low-ability students in class 5SG. These students compensate by offering more "don't know" or "other" reasons (38%). Just the opposite occurs in class 2/3G where the two highest groups use assignment to groups not nearly as often (6%) as the two lowest groups (38%). There are no other grade or ability differences in reasons given.

Table 3 does suggest some difference in reasons given according to the nature of the comparison. When comparing low and middle readers, students in grouped classes concentrate less on group membership and more on task performance than they do in making other comparisons. Apparently there is something especially salient about the overt performance of low achievers. However, even here students describe academic performance (especially oral reading) and not general classroom behavior.

This information about reasons does not really clarify the source of disagreement in the grouped and staggered-grouped classes. Students in the staggered-grouped classes give assignment reasons about half the time while those in the grouped class use assignment as a secondary reason only about a quarter of the time. On the one hand, students might have less agreement when they give assignment reasons. This could occur if they do not know group order or who is in which group. On the other hand, students might agree when they use assignment reasons but disagree when they use task performance or other reasons because of the limited information they have available. To distinguish between these possibilities, we examined

agreement as a function of reason given. These data are reported in Table 4.

Table 4 shows that use of assignment as a reason is not the general source of disagreement. When the students in staggered-grouped classes use assignment as a reason, they agree 88% of the time. Students in the grouped class do even better since they agree 100% of the time when assignment reasons are used. These rates are quite similar to the 90% agreement rate for whole-class students using their preferred reason -- task performance. However, when students in staggered-grouped classes rely on task performance they agree less (78%). Students in the grouped class also have difficulty agreeing when task performance is used (68%). This is presumably the result of having less information with which to evaluate task performance. The lowest agreement rate, however, is for students in staggered-grouped classes who could not give a reason or who give an idiosyncratic reason (58%). Many of these students are the lowest-ability students in class 2SG. This suggests that, in addition to the lack of task performance information, or perhaps because of it, some students fail to develop any reliable dimension for evaluating reading skill.

Although agreement is generally high when students use assignment as a reason, there are ability differences. In the staggered-grouped classes a clear pattern emerges. Students in the highest ability groups who use assignment as a reason have 100% agreement in choosing the better reader. In the average-high group, there is a 95% agreement; in the average-low group, 80%; and in the lowest group, 70%. In other words, high-ability students use grouping reasons with extreme accuracy, even in second grade. Low-ability students have more difficulty. Remember that the lowest ability

students in class 2SG seldom use grouping as a reason, so this means that most of the low-ability students with 70% accuracy are fifth-graders. Even at this age they have trouble knowing book order and presumably also in knowing who is in which group. They know group membership is a relevant and important dimension for comparing students but they have not completely analyzed and understood the specifics of their classroom situation.

A different pattern emerges in the grouped classroom. Even though students at all ability levels who use assignment reasons have high agreement (100%), high-ability students tend not to use assignment to groups as often as low-ability students. High-ability students tend to rely on task performance descriptions; however, as noted earlier, these students have poorer agreement rates than low-ability students in the class. In other words, high-ability students use task performance reasons and are quite inaccurate while low-ability students use grouping with extreme accuracy. While this ability pattern is the exact reverse of that found in the staggered-grouped classes, this suggests that low-ability students, even second-graders, can use grouping reasons quite successfully.

### Discussion

These results provide information about how children understand and evaluate good reading in classrooms. The structure of the classroom clearly influences the meaning that students attach to the phrase "better reader," the factors they consider when comparing the performance of two students and, therefore, how much agreement exists about who is better.

Students tend to interpret the question "who is a better reader?" as a question about specific reading performance. They focus on oral

reading performance and give vivid descriptions of their classmates' performances. This focus on oral performance is noteworthy. It may in part be a result of the way the question was asked. While "who is a better reader?" may concentrate attention on oral performance, a question like "who does better in reading?" might produce different results. Nonetheless, students tend to ignore performance on reading tasks like worksheets, even though these are often completed or checked in a whole-class lesson where public performance is exhibited. They also ignore how well students comprehend what they read. Teachers might want to consider what aspects of reading are important to them, both within and outside the domain of oral reading, and how these values can be communicated to students.

Classroom organization appears to influence student perceptions of who are better readers. For the two classes with whole-class instruction, students agree on who is better about 90% of the time. They base their decision on a detailed analysis of oral reading performance. Smooth, error-free reading with expression sounds good to everybody.

In the grouped and staggered-grouped classes, the situation is more complex and there is less agreement about who is better. Many students in these classes clearly focus on group membership as a way of deciding who is better and are extremely accurate when using this criterion. Sometimes students continue to use task performance as a basis for their decision. They gather information from large-group activities, from oral reading during social studies or science, and from eavesdropping. But the information base is smaller than in whole-class reading; therefore, students are somewhat less accurate when using task performance reasons

in these grouped classes than in classes with whole-class reading instruction.

These results about classroom structure are consistent with those of Rosenholtz and Wilson (1980) in that agreement is lower in classes which are more differentiated. It is interesting that the effect should occur even in grouped and staggered-grouped classes, a mild and prevalent form of differentiation compared to a classroom such as the multitask classes described by Bossert (1979), where there are many different activities occurring simultaneously and groups are flexible.

Very little of our data indicates that students' ages have any effect on their perceptions. Earlier work has indicated that younger children focus on work habits and general classroom behavior when making ability comparisons of their peers (Clements et al., 1980; Stipek, 1981). While our results do suggest a slight tendency for younger students to use behavior reasons more often than older students, these younger children rely more on group placement and specific task performance, as do their older counterparts. Once again, the discrepancy in our results may be a function of the way the question was worded.

Nevertheless, ability differences in students' perceptions were discovered. In the staggered-grouped classroom organization, all but the lowest ability second-graders seem to know that the student in the higher group is a better reader. However, there are ability differences in the students' capacities to use assignment reasons accurately. Low-ability students are less likely to know the correct order of the textbooks. This may be partly due to their lack of familiarity with the books they have not yet encountered, but some students even place their own book

incorrectly. In addition to knowing book order, students must know who is in which group. While high-ability students seem to know both book order and group membership quite well, even in second grade, low-ability students have not yet assimilated all of this information, even by fifth grade.

Results from the grouped class (not on a staggered schedule) indicate that the simultaneous operation of groups may affect students of varying ability levels differently from the staggered schedule. High-ability students from the grouped class are less accurate in their judgments than their counterparts from the staggered-grouped classes. Likewise, low-ability students from the grouped class are more accurate than low-ability students from the staggered classrooms. As in the staggered-grouped classes, students who use assignment reasons are more accurate in judging readers than those who use task performance descriptions.

These data on ability differences suggest two important points. First, in any classroom organization where groups are operating, students who attempt to use the task performance of their peers are less likely to make accurate judgments. This seems to hold no matter what ability group may try to use task performance. Second, being in a classroom where reading groups operate at the same time may provide low-ability students with useful information for judging other students in the classroom.

Further research is needed to extend our understanding of specific structures and their effects on students of varying ages and abilities. In particular, it would be important to disentangle the effects of grouping from the effects of the staggered schedule. The staggered schedule is itself

one form of differentiation and our data seem to suggest that this might isolate students and limit the information they have about one another. If all reading groups operate at the same time in the classroom, students might have more information and therefore more agreement. In addition, this line of research may begin to clarify the classroom conditions which allow low-ability students to be more aware of grouping practices than high-ability students.

Clearly, teachers can arrange their classrooms to increase or decrease the amount of information students receive which can influence their views of each other and presumably, themselves. Establishing reading groups rather than using whole-class reading instruction appears to provide a more open situation in which students are not locked into a uniform assessment of skill. Teachers might want to provide opportunities within their programs for differentiated activities such as instructional groups. Teachers also can provide activities which foster the self-confidence and participation of low-ability children by differentiating activities so that reading and verbal ability are not the sole criteria for successful performance. One such program outlined by Rosenholtz (1979) is the Multiple Abilities Curriculum which is designed to help students who are low achievers in conventional classroom skills by focusing on different areas such as visual thinking, reasoning, and intuitive thinking. This arrangement increases low-ability students' expectations for future performance, encourages them to participate, and makes peers more accepting of their contributions. Additional research has found that low-ability students benefit from opportunities to work cooperatively, both in homogeneous groups (Cohen and Intili, 1981) and in heterogeneous small groups (Peterson, 1981; Webb, 1981).

Teachers might think about the consequences of their classroom organization for student perceptions and might consider these suggestions for differentiated activities.

### Footnotes

- <sup>1</sup> The authors wish to thank Steven Bossert and Ginny Lee for their comments on an earlier draft of this paper.
- <sup>2</sup> The highest group in the second grade class met with another teacher for reading the first part of the year as part of a team teaching arrangement. At this time, they were morning readers. In January they moved back to the regular teacher's class and joined the afternoon group. They read with the average-high group for about two weeks and then were shifted to a separate group.
- <sup>3</sup> This paper describes only part of the interview data collected in field work by the Class Size and Instruction Program. Additional questions probed student self-perceptions as well as other issues related to perceptions of doing a good job on school work.

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TABLE 1

## Student Agreement on Choice of Better Readers

| Class         | 2SG  |     | 2W   |    | 2/3G |     | 5SG  |    | 5W   |    | Group<br>Average |
|---------------|------|-----|------|----|------|-----|------|----|------|----|------------------|
| Ability group | (n)  | %   | (n)  | %  | (n)  | %   | (n)  | %  | (n)  | %  | %                |
| High          | (16) | 83  | (18) | 89 | (3)  | 67  | (23) | 90 | (15) | 93 | 88               |
| Average-high  | (20) | 100 | (14) | 85 | (16) | 69  | (23) | 78 | (30) | 93 | 86               |
| Average-low   | (26) | 72  | (18) | 89 | (17) | 76  | (17) | 77 | (3)  | 89 | 78               |
| Low           | (15) | 42  | (17) | 89 | (6)  | 100 | (16) | 77 | (6)  | 89 | 75               |
| Class Average |      | 74  |      | 88 |      | 76  |      | 81 |      | 91 | 82               |

TABLE 2

## Knowledge of Book Order

| Class         | 2SG |     | 2W  |    | 2/3G |     | 5SG |    | 5W   |    | Group<br>Average |
|---------------|-----|-----|-----|----|------|-----|-----|----|------|----|------------------|
| Ability Group | (n) | %   | (n) | %  | (n)  | %   | (n) | %  | (n)  | %  | %                |
| High          | (6) | 100 | (6) | 83 | (1)  | 0   | (7) | 86 | (5)  | 60 | 83               |
| Average-high  | (5) | 80  | (5) | 60 | (6)  | 67  | (8) | 88 | (10) | 70 | 74               |
| Average-low   | (9) | 89  | (6) | 67 | (7)  | 71  | (6) | 33 | (1)  | 0  | 65               |
| Low           | (4) | 50  | (6) | 67 | (3)  | 100 | (5) | 40 | (2)  | 50 | 60               |
| Class Average |     | 80  |     | 69 |      | 71  |     | 62 |      | 45 | 71               |

TABLE 3

## Reason for Choice of Better Readers

| Reason           | Comparison      |             |            |              |             |             |             |            |              |             |               |             |            |              |             |            |             |              |             |
|------------------|-----------------|-------------|------------|--------------|-------------|-------------|-------------|------------|--------------|-------------|---------------|-------------|------------|--------------|-------------|------------|-------------|--------------|-------------|
|                  | Low-Middle      |             |            |              |             | Middle-High |             |            |              |             | Middle-Middle |             |            |              |             | Same-Group |             |              |             |
|                  | Class:<br>n=( ) | 2SG<br>(24) | 2W<br>(21) | 2/3G<br>(16) | 5SG<br>(27) | 5W<br>(22)  | 2SG<br>(25) | 2W<br>(23) | 2/3G<br>(11) | 5SG<br>(27) | 5W<br>(22)    | 2SG<br>(19) | 2W<br>(24) | 2/3G<br>(13) | 5SG<br>(25) | 5W<br>(22) | 2SG<br>(21) | 2/3G<br>(17) | 5SG<br>(22) |
| Assignment       |                 | 38          | 5          | 19           | 33          | 0           | 52          | 0          | 28           | 52          | 0             | 63          | 0          | 24           | 48          | 0          | 0           | 5            | 12          |
| Behavior         |                 | 8           | 14         | 31           | 4           | 9           | 4           | 17         | 18           | 4           | 5             | 0           | 13         | 24           | 12          | 18         | 5           | 32           | 4           |
| Evaluation       |                 | 0           | 0          | 0            | 4           | 9           | 0           | 9          | 0            | 4           | 23            | 0           | 0          | 8            | 0           | 5          | 0           | 11           | 0           |
| Task Performance |                 | 38          | 71         | 44           | 52          | 77          | 16          | 70         | 54           | 37          | 73            | 16          | 75         | 46           | 36          | 77         | 67          | 47           | 69          |
| Don't Know       |                 | 8           | 5          | 7            | 4           | 5           | 20          | 4          | 0            | 4           | 0             | 11          | 0          | 0            | 4           | 0          | 19          | 5            | 4           |
| Other            |                 | 8           | 5          | 0            | 4           | 0           | 8           | 0          | 0            | 0           | 0             | 11          | 13         | 0            | 0           | 0          | 10          | 0            | 12          |

TABLE 4

Agreement on Choice  
(By Reason and Classroom Organization)

| Reason           | Classroom Organization          |     |                   |     |                         |     |
|------------------|---------------------------------|-----|-------------------|-----|-------------------------|-----|
|                  | Staggered-Grouped<br>(2SG, 5SG) |     | Grouped<br>(2/3G) |     | Whole-Class<br>(2W, 5W) |     |
|                  | (n)                             | %   | (n)               | %   | (n)                     | %   |
| Assignment       | (69)                            | 88  | (9)               | 100 | (1)                     | 100 |
| Behavior         | (8)                             | 75  | (10)              | 70  | (16)                    | 75  |
| Evaluation       | (2)                             | 100 | (1)               | 100 | (10)                    | 100 |
| Task Performance | (49)                            | 78  | (19)              | 68  | (98)                    | 90  |
| None/Other       | (19)                            | 58  | (1)               | 100 | (7)                     | 86  |